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Award Number: DAMD17-00-1-0046

TITLE: Informed Consent for Prostate Screening with Prostate  
Specific Antigen in African American, Hispanic, and  
Caucasians

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<b>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</b> University of Texas Health Science Center-Houston Houston, Texas 77225  E-Mail: <a href="mailto:evelyn.c.chan@uth.tmc.edu">evelyn.c.chan@uth.tmc.edu</a>			<b>8. PERFORMING ORGANIZATION REPORT NUMBER</b>	
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<b>13. ABSTRACT (Maximum 200 Words)</b> Prostate cancer screening with prostate specific antigen (PSA) is controversial because it is not clear whether it reduces the mortality and morbidity from prostate cancer. Several professional organizations recommend informing men about the risks and benefits of screening. The purpose of this award was to develop educational brochures about prostate cancer screening with PSA for African Americans, Hispanics, and under-served Caucasians, and thereby promote informed decision making about screening. We have completed focus group meetings for the African Americans and Caucasians and have developed a prototype brochure for each group that we are now refining. African Americans felt strongly that a brochure should include the advantages and disadvantages of screening with the digital rectal exam, as well as PSA, because of its perceived embarrassment. They also wanted graphics reflecting their African roots. We have convened one Hispanic focus group and are recruiting another for Hispanic brochure development. In the training component of this award, Dr. Chan has completed course work in biostatistics at the University of Texas School of Public Health. Results of the work completed so far have been accepted for presentation at the national meeting of the Society of General Internal Medicine.				
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## **INTRODUCTION**

This research is a collaborative effort between the University of Texas-Houston Health Science Center Medical School, School of Public Health, and Texas Department of Health (TDH) to develop and pilot test culturally appropriate brochures about prostate cancer screening with prostate specific antigen (PSA) for African Americans, Hispanics and Caucasians. Although PSA screening is widespread, knowledge of it is low. African American men have a higher incidence of prostate cancer, are more likely to be diagnosed at an advanced stage and have higher mortality rates than Caucasian men, but they remain largely ignorant about PSA screening. Hispanics are unlikely to know more about PSA screening than Caucasians since many emigrate from Latin American countries where preventive health care is not emphasized. Mass screening for prostate cancer with PSA is controversial because it is not clear whether it reduces the mortality from prostate cancer. Until clinical trials resolve this issue, informed consent for PSA screening is recommended. Studies suggest that culturally appropriate information about prostate cancer screening may promote knowledge, and thereby informed decision making about it, among minorities. In a preliminary study, the principal investigator (PI) asked experts in prostate cancer and couples what facts they believe men ought to know about PSA screening. Drawing upon their responses to arrive at a proposed standard of informed consent for PSA screening, the PI incorporated key facts about PSA screening into culturally appropriate brochures. She has convened focus groups of African American, Hispanic and Caucasian couples to discuss the content and design of three brochures promoting knowledge about prostate cancer screening in each of the three ethnic groups. The PI will pilot test the brochures among men eligible for PSA screening to find out how well they comprehend them. She will work with the TDH to distribute brochures resulting from this proposal during Prostate Cancer Awareness Week. The brochures may also serve as culturally appropriate educational models for other State Departments of Health to follow.

## **BODY**

We first convened a focus group of 5 African American couples and a focus group of 5 Caucasian couples who each met twice. We also convened one Hispanic group so far. This process is described below in accordance with the Statement of Work.

### **Phase 1: Project startup and recruitment of focus group participants**

The principal investigator (PI) hired a research assistant for recruiting focus groups and for assistance with data collection. Then the PI developed a preliminary patient brochure containing 17 key facts about the prostate specific antigen (PSA) test derived from the PI's preliminary study. The PI and research assistant then recruited focus group participants from a list of men age 50 or older who had been seen at the University of Texas Internal Medicine Clinic within the past year. We screened for eligible men through a brief telephone interview. The Caucasian men who participated ranged in age from 50 to 79 years old. The African American men who participated ranged in age from 56 to 73 years old. Hispanic men ranged in age from 51 to 73 years old. Their spouses were also invited to attend. The Hispanic participants were all bilingual in Spanish and in English and were of Mexican decent.

## **Phase 2: To develop culturally appropriate brochures for African Americans and Caucasians and to review the preliminary study data with Hispanic couples**

The African American focus group met twice, as did the Caucasian focus group. At the first meeting, participants were shown a 30-minute videotape about prostate cancer and prostate cancer screening produced by the Prostate Outcomes Research Team in Dartmouth, VT. They were also shown a preliminary patient brochure containing 17 key facts about PSA screening that the PI had developed with the research assistant. Participants were asked to review the content of the brochure based on what they had learned from the videotape and based upon their own knowledge about prostate cancer screening. They were asked to provide suggestions on how to design a brochure targeted to men in their ethnic/racial group.

At the conclusion of the first meeting of both types of groups, we found some differences in the approaches that each ethnic group would use. There were differences in content emphasis and in graphic design choices between the brochures that African Americans and Caucasians would design for members of their racial/ethnic group. Because of the perceived discomfort and embarrassment associated with the digital rectal exam (DRE), African American men felt strongly that it was important to emphasize the advantages and disadvantages of screening with the DRE, as well as the PSA. Caucasian men did not discuss the DRE at all. African American men believed it was important to emphasize epidemiologic data specific to African American men, such as their higher risk of prostate cancer. They also preferred images and symbols rooted in African American culture (eg. Kente cloth).

The PI and research assistant drew upon suggestions made at the first meeting of the focus groups to arrive at mock-up brochures for the African American and Caucasian participants. These mock-up brochures were discussed at the second meeting of both types of groups. Refinements in the design were made with attention to format, style, layout and title of the brochure. The African American participants preferred graphic images reflecting family themes, for example, a picture of a man with his father. The Caucasian participants preferred graphic images reflecting lifestyle activities, such as a picture of a man barbequing or walking his dog. Both ethnic/racial groups wanted a diagram showing where the prostate is located relative to other anatomical structures and a picture of a man with his physician to highlight to readers the need to discuss prostate cancer screening with a physician. At present, we have recently contracted with an independent graphics design artist to complete brochure design for these two ethnic groups, based upon group suggestions made at the second meeting. The PI has also presented the mock-up brochures to members of the Texas Department of Health and the State Prostate Cancer Advisory Committee in a meeting held in January, 2001.

In career development, the PI completed coursework in biostatistics at the University of Texas-School of Public Health. Biometry II covered measurement problems, descriptive statistics, graphics, sampling distributions, hypothesis testing, comparison of samples, non-parametric methods, regression and correlation theory, and computer applications. Biometry III covered one and two-way classifications for attributes and measurements, analysis of discrete data, factorial experiments and multiple regression analysis with computer applications. A course in clinical trial design offered through the University of Texas-School of Medicine covered issues relating to the design of clinical trials, including randomization, blinding, sample size, baseline

assessment and recruitment, data collection and quality control, participant adherence, health related quality of life, survival analysis, monitoring response variables, issues in data analysis, meta-analysis, and principles of applying the results of clinical trials to individual patients.

**Phase 3: To develop a culturally appropriate brochure for Hispanics and to pilot test all brochures developed on men eligible for prostate specific antigen screening to see how well they understand it and what impact it has on their knowledge of PSA**

We have convened one group of 5 Hispanic couples so far. We asked them to review a videotape about prostate cancer and prostate cancer screening, as well as 17 key facts about it. They were asked to add any other key facts about prostate cancer screening that they believed men ought to know. They recommended adding eight additional facts. These included: the fact that the PSA test is painless; that screening for prostate cancer can be done annually; that there is no special diet or exercise program to prevent prostate cancer; that a man age 50 and older should discuss prostate cancer screening with his doctor; that a man may have no symptoms of early prostate cancer, but back pain and urinary problems if it is advanced; that in the digital rectal exam, the doctor uses a gloved finger to feel for abnormal lumps in the prostate; that the prostate is a gland about the size of a very small lime that surrounds the tube through which urine passes; and that the digital rectal exam can be embarrassing for some men.

We are now recruiting Hispanics for another focus group that will meet twice to review these facts and make recommendations about brochure design. We will pilot test all brochures developed to see how they impact upon patient knowledge after we complete designing them.

### **KEY RESEARCH ACCOMPLISHMENTS**

- Completion of career development coursework for principal investigator consistent with the career development requirements of this award.
- Completion of focus group discussions for Caucasians and African Americans with identification of key areas of divergence in the way they would present information to their ethnic/racial group.
- Development of mock-up brochures for Caucasians and African Americans which we are now refining with the assistance of a graphics design artist.
- Identification of content areas that Hispanic couples would like in the Hispanic brochure

### **REPORTABLE OUTCOMES**

An abstract of the work completed so far has been accepted for presentation at the national meeting of the Society of General Internal Medicine in May, 2001. The abstract is included in the Appendix.



## **CONCLUSIONS**

As this project is still in progress, we have yet to make final conclusions on the work presented so far. However, we have identified areas where African Americans and Caucasians differ in the way they would want information about prostate cancer screening presented to their ethnic/racial group.

## **REFERENCES**

The preliminary work mentioned in this report was published as:

Chan ECY, Sulmasy DP. What should men know about prostate-specific antigen screening before giving informed consent? *Am J Med.* 1998;105:266-274.

## **APPENDIX**

See the following page with an abstract accepted by the Society of General Internal Medicine for presentation at their annual meeting in May, 2001.

DIFFERENCES IN THE WAY AFRICAN AMERICANS AND CAUCASIANS WOULD PRESENT FACTS ABOUT PROSTATE CANCER SCREENING. ECY Chan, SW Vernon, F O'Donnell, M Haynes, C Bachino. Division of General Internal Medicine, School of Medicine, and Center for Health Promotion and Prevention Research, School of Public Health; UT-Houston Health Science Center, Houston, TX.

Background: The purpose of this pilot study was to determine whether there are differences in the way Caucasians and African Americans would present facts about prostate cancer screening in a culturally appropriate brochure to men considering screening. Because screening with prostate specific antigen (PSA) is controversial, several professional organizations recommend informing men about the risks and benefits of screening. Compared to Caucasians, African Americans have a higher risk for prostate cancer and are less knowledgeable about screening. In a previous study, experts in prostate cancer and Caucasian and African American couples with screened and unscreened men identified 17 key facts about PSA they believe men ought to know.

Methods: We convened a focus group of 5 African American couples and a focus group of 5 Caucasian couples who each met twice. At the first meeting couples viewed a videotape about prostate cancer and screening and were asked to discuss how to present the 17 key facts in a culturally-sensitive way in terms of content and format. Mock ups of brochures were developed for discussion at the second meeting. We analyzed transcripts of the focus group meetings using content analysis to identify differences between African American and Caucasian groups in how to present this information.

Results: We found differences in content emphasis and in graphic design choices between the brochures that African Americans and Caucasians would design for members of their racial/ethnic group. Because of the perceived discomfort and embarrassment associated with the digital rectal exam (DRE), African American men felt strongly that it was important to emphasize the advantages and disadvantages of screening with the DRE, as well as the PSA. Caucasian men did not discuss the DRE at all. African Americans believed it was important to emphasize epidemiologic data specific to African American men, such as their higher risk of prostate cancer. They also preferred images and symbols rooted in African American culture (eg. Kente cloth).

Conclusion: African Americans and Caucasians differed in the way they chose to present facts about prostate cancer screening to members of their racial/ethnic group. Cultural differences in format and content need to be considered when designing educational materials such as brochures.



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